

31st January 2024

Mrs E A Parr
PPC Compliance Assistant
Natural Resources Wales
Rivers House
St Mellons Business Park
St Mellons
CARDIFF
CF3 0EY

Our Ref: w:\Environmental\IPPC\Environment Agency Reporting\Permit Reporting\Rod and Bar Mill\1.
Returns\NRW\3.Annual\2023\BV0759IC 4.1.4 Annual return 2023.docx

Dear Mrs Parr,

RE: Rod and Bar Mill EPR Permit BV0759IC 4.1.4 Annual Returns 2023

In accordance with CELSA Manufacturing UK Ltd Environmental Permitting Regulations (EPR) Rod and Bar Mill Permit BV0759IC, permit condition 4.1.4 requires the following:

4.1.4 The Operator shall review fugitive emissions, having regard to the application of Best Available Techniques, on an annual basis, or such other period as shall be agreed in writing by the Agency, and a summary report on this review shall be sent to the Agency detailing such releases and the measures taken to reduce them within 3 months of the end of such period.

Principle sources of fugitive emissions from the Rod & Bar Mill are from:

- Roof vents located over the cooling beds, rolling mill and furnace areas, which release direct to air from within the building and contain water vapour from the cooling circuit and any dust emitted from the process activities. Process contributions to the building air are minimised through the use of local exhaust ventilation (LEVs) and through operating procedures aimed to minimise dust.
- The water treatment system clarifier can also give rise to fugitive emissions, principally water vapour.

Operations that may give rise to fugitive emissions of dust to air and do not have LEVs are:

- Furnace refractory works
- Scale removal from the furnace

Both operations are undertaken within the main rolling mill building.

Operations that may give rise to fugitive emissions to surface water, sewer and groundwater are:

- Leaks and Spills

1.0 Control of Fugitive Emissions to Air

1.1 Furnace Refractory Works

During 2023, there have been no fugitive releases to air from the permitted activities. No complaints have been received regarding fugitive emissions related to the furnace refractory works at the Rod and Bar Mill.

During refractory works the furnace is kept under negative pressure thus preventing the escape of dust. Replacement of refractories is only undertaken during plant shutdown periods and the waste generated is contained within skips. The refractory material does not typically produce fugitive dust as it is in the form of large solid pieces. Ceramic fibres are dealt with under specific health and safety requirements, double bagged and sealed prior to being disposed of offsite.

The furnace refractory replacement is undertaken when the furnace is not in operation. However, the furnace extraction system is in operation during refractory repairs and replacements to provide a more comfortable working environment for the refractory engineers. The extraction applied is not significant as it only provides fresh cool air which does not lead to any release from the process. Any dust arising settles within the furnace and is collected by vacuum when removing scale from the hearth.

Any waste, which accumulates in the furnace flue-ways, is periodically removed by a specialist waste contractor using a vacuum to extract the dust into closed skips for subsequent off-site disposal. There have been no changes to the above activities during 2023.

1.2 Scale Removal from the Furnace

No complaints have been received regarding scale removal from the furnace at the Rod and Bar Mill during 2023. Every week, scale is removed from the furnace hearth via the furnace access doors. The scale is manually scraped into purpose handling bags before being emptied into a dedicated scale skip. Fugitive dust is not typical from the scale, as the flakes are typically large, dense particles.

Scale accumulating on the floor of the furnace is removed during shutdown periods. The scale flakes are large, dense particles that are not prone to dust generation

2.0 Control of Fugitive Emissions to Surface Water, Sewer, and Groundwater

2.1 Leaks and Spills

Surfacing

Activities that may give rise to fugitive emissions are conducted on areas with concrete hard standing.

There have been no changes or complaints regarding these activities in 2023.

Drainage and Other Sub-Surface Structures

The sub-surface structures on site comprise of the basement lubricating oil and oil storage areas and an underground rainwater surge tank; additionally, there are no underground storage tanks at the Rod and Bar Mill. The cellars were constructed as part of the foundations of the process and consist of reinforced concrete, which provides an impervious layer with an average thickness of 300mm, with all floor levels below ground level and no drains are present in any of the cellars. The cellars are significantly larger in volume than the sum of the individual tanks within them, and as such any spillage would be contained.

A locked penstock valve is fitted to the RBM W1 discharge point to East Bute Dock and has been closed for the duration of 2023. No water has been discharged to Bute East Dock during 2023. All water used in the process is recirculated within the water treatment system on site.

There are no other underground storage tanks on site. All surface drainage from areas of hard standing run to a combined surface/foul sewer. There have been no changes to these activities throughout 2023.

Secondary Containment

All storage containers of oils and chemicals are stored within secondary containment in place. Following the publishing of Water Resources (Control of Pollution) (Oil Storage) (Wales) Regulations 2016 and following best practice guidance (Pollution Prevention Guidelines: PPG 2 — Above Ground Oil Storage Tanks), all tanks, drums, or other containers of more than 200 litres are inspected monthly during internal audits, where bund inspections are also conducted. All fill points are within the bunded areas. There have been no changes or complaints regarding these activities in 2023.

During 2023, a bunded storage cabinet was installed in the south end of the Bar Mill for the purpose of storing waste oil and grease stored in barrels and intermediate bulk containers (IBCs). The container has the capacity to store 96 (200 litre) oil barrels or 24 IBCs. Additionally, a brick bund adjacent to the cooling tower was rebuilt and painted with a chemical sealant to ensure all water treatment chemicals stored in this area are contained within the bund and prevent any potential for leaching outside of the bunded area.

As there have been no changes the above activities or any complaints received relating to secondary containment during 2023, the current controls for fugitive emissions are deemed relevant and up to date.

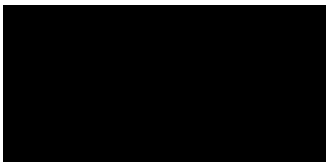
Water Emissions

Two Schedule 5 forms were submitted in March of 2023. The first schedule 5 notification was submitted due to a release of effluent into an embankment from a cellar. An investigation found the cause of the flooding was from a blocked drain. The blockage is believed to be a direct result of the road resurfacing work, carried out previously outside the Bar Mill. The extraction pipe has since been re-routed to a drain on site, which flows directly to the water treatment plant. This water is treated and recirculated within the Rod and Bar Mill water treatment plant system.

A second Schedule 5 notification was submitted due to a release of water from an overflowing cooling tower structure to ground. This water contained a chemical dosing agent to treat water for legionella. Upon further investigation, it was found the overflowing water was caused by water seeping underneath a filter material that allows steam to escape. A seal underneath the filter material was created to stop water from seeping out of this area, which will prevent this incident occurring in the future. Additionally, the Rod and Bar Mill also added a single brick retainer bund around the edge of the cooling tower first floor area to prevent any water cascading over the sidewalls. Drainage holes were also constructed within the bund to allow any pooling water within the bund area to flow back into the water tank.

Should you require any further information regarding permit condition 4.1.4 and these works please do not hesitate to contact me.

Yours sincerely



Environmental Advisor